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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/519,605	03/06/2000	Peter C P Sun	WC99-001	8201

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EXAMINER

ODLAND, DAVID E

ART UNIT	PAPER NUMBER
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2662 //

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/519,605

Applicant(s)

SUN, PETER C P

Examiner

David Odland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The following is a response to the amendments filed on 02/24/2004.

Specification

2. The disclosure is objected to because of the following informalities:

On page 10, the last line, of the specification recites, "...are wired with two separate phone lines even though only is used to connect to..." This statement is of improper English grammar. Appropriate correction is required.

Claim Objections

3. Claim 10 is objected to because of the following informalities:

Claim 10 recites "...and completing connection to said ISP is completed when the LTW responds..." (see lines 3 and 4). This statement is of improper English grammar. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1 and 11 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not

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described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, claim 1 recites that the plurality of telephone wires are connected together to provide an *analog* telephone network. The specification does not describe the telephone wires providing an 'analog' telephone network.

Claim 11 recites a connector originally used to provide a connection for an *analog* phone device. The specification does not describe the original connector being for an 'analog' telephone.

Also referring to claim 1, the specification does not describe the invention as being configured such that only one analog phone can communicate on a given line at one time.

Claims 2-5, 11 and 12 are also rejected because they depend on claim 1.

6. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Referring to claims 3, the specification does not adequately disclose how the 'Token in Ethernet Protocol (TEP)' operates, in such a manner as to allow one of ordinary skill in the art to build and use the claimed invention.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites that the plurality of telephone wires provide an analog telephone network in which only one analog phone can communicate on a given line at one time (see (c) in claim 1). This limitation is confusing because the specification describes an entirely different system. Specifically, although the specification describes on page 2 that only one phone can be used to communicate on a single communications line at one time, this description is related limitations of the *prior art* telephone method and the specification goes on to describe how the invention overcomes this limitation of the prior art and actually allows multiple telephone calls to take place over a communications line. In fact, the present invention does not even use an *analog* telephone network to process the telephone calls. As shown in figure 2a, the calls are sent over line 22 using an Ethernet protocol, which is a *digital* communications protocol.

Claims 2-5, 11 and 12 are also rejected because they depend on claim 1.

Claim 13 recites "...a hang up packet to queue with the LTW..." It is unclear what is being queued and where it is being queued at. Furthermore, the claim recites "...but a hang up packet from the LTW has not been received..." This limitation is confusing; it is unclear why the LTW would be sending hang up packets since it is not a telephone and does not hang up and if it is sending hang up packets on behalf of some other node, it is unclear which node is hanging up.

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Claim 15 recites sending a request for connection packet to the second VDM. This limitation is confusing because step (a) in claim 6 recites that the second VDM is the one connecting to the first VDM, therefore why would it be receiving a request for connection?

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-4, 11 and 12, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Baratz et al. (USPN 5,742,596), hereafter referred to as Baratz.

Referring to claim 1, Baratz discloses a voice and data network (a voice and data network (see figure 1)), comprising:

a) a telephone and a computer connected to a voice and data module (VDM) (each host computer has a voice and data module with a computer and phone connected thereto (Note, the NIC and TCM cards of the host computer, as a whole, are being considered a voice and data module since the NIC is used for data communication by the host computer and the TCM is used by the telephone for voice communication and they also communicate between each other) (see items 42 and 43 of figure 1)),

b) a plurality of said VDM devices connected to a plurality of telephone wires in a building (a plurality of voice and data modules is connected through wires of a network (see figure 1)),

c) said plurality of telephone wires connected together to provide a telephone network in which only one analog phone can communicate on a given line at a time (the connected wires comprise a network and specifically there is a wire attaching the phone 42 to the TCM 174 wherein only one that phone 42 can communicate on at one time (see figure 1)),

d) a link to wide area network (LTW) connects said telephone network to a Public Service Telephone Network (PSTN) and an Internet Service Provider (ISP) (a telephony server connects the network to the PSTN and Internet (see figure 1)),

e) said LTW and said plurality of said VDM devices communicate together over said telephone network using communication addresses assigned to said LTW and each VDM of said plurality of VDM devices (the voice and data modules and the telephony server communicate using their assigned addresses (see figure 1 and column 6 lines 16-38)).

Referring to claim 2, Baratz discloses the system discussed above. Furthermore, Baratz discloses that the plurality of said VDM devices connect a plurality of telephones and a plurality of personal computers (the voice and data modules connect a plurality of host computers and a plurality of telephones (see figure 1)) to a plurality of data signals and a plurality of voice signals on said telephone network operating concurrently (to a plurality of voice and data signals on the network (see figure 1)).

Referring to claim 3, Baratz discloses the system discussed above. Furthermore, Baratz discloses that said LTW and said plurality of VDM devices communicate over said network of telephone wires by means of Token in Ethernet Protocol (TEP) technology (the voice and data modules communicate with the telephony server using the Ethernet protocol (see column 4 lines 30-34)).

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Referring to claim 4, Baratz discloses the system discussed above. Furthermore, Baratz discloses that telephone service is provided to said building from said ISP and said PSTN (the telephones are coupled such that they receive service from the PSTN and the Internet (see figure 1)).

Referring to claim 11, Baratz discloses the system discussed above. Furthermore, Baratz discloses that at least one VDM device is connected to the telephone wires by a connector originally used to provide a connection for an analog phone device (traditional telephones are connected to the voice and data modules through a wire connected direct to the traditional telephone (see traditional telephone 42 and the wire connecting it to the TCM 174, which is part of the voice and data module)).

Referring to claim 12, Baratz discloses the system discussed above. Furthermore, Baratz discloses that each of the plurality of VDM modules has a telephone and computer connected thereto, each telephone and computer having a unique address with respect to all other telephones and computers connected to VDM modules (the devices in the network communicate using the Ethernet protocol and thus have unique addresses since Ethernet requires it (see figure 1))

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 5-10 and 14-16, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Baratz.

Referring to claim 5, Baratz discloses the system discussed above. Baratz does not disclose that more than one LTW is connected to said telephone network. However, It would have been obvious to one skilled in the art at the time of the invention to have more than one telephony server coupled to the network in Baratz because doing so has many benefits such as parallel processing wherein the processing power of more than one server can be used, thereby increasing the operating speed in the Baratz network and another benefit would be in redundancy, wherein if one server fails there will be another server that can support the system, thereby making Baratz more reliable.

Referring to claim 6, Baratz discloses a method for communicating between network elements in a voice and data network, comprising:

a) monitoring a communication network by a first voice and data module (VDM) for a call from a second VDM and a call from a link to a wide area network (LTW) connected to said communication network (each voice and data module checks for incoming signals that may come from either other voice and data modules on the local Ethernet or from outside the local Ethernet by-way-of the telephony server (see figure 1 and columns 5 and 6)),

b) monitoring a first phone and a first computer attached to said first VDM for an outgoing call to a destination containing a second phone and a second computer connected to said second VDM (the voice and data modules inherently check for signals from the telephone and/or computer that are attached to it for any outgoing calls that may be destined for another voice and data module on the network (see figure 1 and columns 5 and 6)), or an outside phone

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and an outside computer network through said LTW (the voice and data modules also inherently check for any incoming calls it might receive from outside the local network by-way-of the telephony server (see figure 1 and columns 5 and 6)),

c) connecting calls includes sending a request for connection packet with an address for said LTW as the destination address (when an external call is being made packets from the telephones are addresses to the telephony server (see column 6 lines 7-16)).

Baratz does not explicitly disclose the steps of connecting an outgoing call if the destination is not busy else providing a busy signal to the source and disconnecting the outgoing call, or connecting an incoming call only if the voice and data modules are not busy else sending back a busy signal and disconnecting the incoming call or disconnecting the calls when they are complete, all of which is specified in steps c-e. However, these steps are typically performed in conventional and ordinary communications systems where calls are set-up, torn down and busy signaling operations are performed, as in that of Baratz. Baratz discloses that calls are set-up through the use of typical DTMF tones and thus also torn down (see column 4 lines 46-48, column 5 lines 63-67 and column 9 lines 18-25). Furthermore, Baratz discloses that the system uses busy signals and checks the status of nodes that are trying to be contacted (see column 6 lines 39-47 and column 7 lines 56-59)). Lastly, Baratz also points out that the telephones of the system are ordinary sets that use DTMF signaling (see column 4 lines 46-48) and that the client related features of the system are the same as those typically found in conventional PBX equipment (see abstract). In light of the above disclosure and the fact that the call connecting, disconnecting and busy signaling procedures, as recited in the claim, are those typically

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performed, it would have been obvious to one skilled in the art at the time of the invention to include these steps in the system of Baratz.

Referring to claim 7, Baratz the system discussed above. Furthermore, Baratz discloses that the connecting, detecting, connecting and disconnecting a call is done with packets that carry communication between said first and second VDM and between said first VDM and said LTW (the voice and data modules communicate with the telephony server to process calls using the Ethernet protocol (see column 4 lines 30-34)).

Referring to claim 8, Baratz the system discussed above. Furthermore, Baratz discloses that communication between computers is done directly in Ethernet protocol eliminating the need for any conversion (the host computers on the network communicate using Ethernet packets (see figure 1 and columns 5 and 6)).

Referring to claim 9, Baratz the system discussed above. Furthermore, Baratz discloses connecting a long distance phone call is done through said ISP without the use of a computer to assist in the call (telephones can be directly coupled to the telephony server in order to make call over the PSTN and therefore no host computer is needed (see figure 1 and column 5)).

Referring to claim 10, Baratz discloses the system discussed above. Furthermore, Baratz discloses detecting a request from said first computer for a connection to an Internet service provider (ISP) (the voice and data module receives a request from a host computer to connect to the Internet (see figure 1 and column 6)), sending request for the connection to said LTW (the voice and data module receives the request from the host computer (see figure 1 and column 6)) and completing connection to said ISP is completed when the LTW responds with a connection

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completed signal (inherently the voice and data module lets the host computer know that it is connected to the Internet so that communication can take place (see figure 1 and column 6)).

Referring to claim 14, Baratz discloses the system discussed above. Furthermore, Baratz discloses sending a packet with a no line available indication from the LTW if an outside line connected to the LTW is not available (the telephony server generates busy signals and sends the signals in Ethernet frames to the telephone attempting to make a call to indicate the lint is unavailable (see column 6 lines 38-47)).

Referring to claim 15, Baratz discloses the system discussed above. Furthermore, Baratz discloses sending a request for connection packet to the second VDM (the second voice and data module can also receive packets from the telephony server that ring the telephone, such a packet can be considered a 'request for connection' packet (see figure 1 and column 6 lines 38-47)).

Referring to claim 16, Baratz discloses the system discussed above. Furthermore, Baratz discloses the telephony server requesting an outside call to extension data for an incoming call (inherently, any calls from the outside going to a particular phone must have a phone number and/or extension associated with it so that the telephony server can properly route the call (see figure 1)). Baratz does not disclose that if an extension is not received using a predetermined the port address as the destination. However, it would have been obvious to one skilled in the art at the time of the invention to implement this feature in Baratz because doing so will allow the call to still take place rather than dropping the call because the extension is unknown, thus making Baratz more reliable. Note, this becomes even more important for emergency calls made in the Baratz system.

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13. Claim 13, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Baratz in view of Angle et al. (USPN 6,366,771), hereafter referred to as Angle.

Referring to claim 13, Baratz discloses the system discussed above. Furthermore, Baratz discloses that the telephony server processes calls using a queue (see figure 5)). Baratz does not disclose using 'hang-up' packets process the calls of the system. However, Angle discloses a system wherein hang-up packets are communicated within a system to indicate the termination of a call (see column 12 lines 1-38)). It would have been obvious to one skilled in the art at the time of the invention to implement this feature in the Baratz system because doing so would tell the telephony server that the call is completed and so the telephony server can free up resources related to that call and use those resources for other calls.

Response to Arguments

14. On page 6 the Applicant indicated that claims 1,6 and 7 have been amended and claims 11-16 have been newly added. For the record, the rejections to claim 1 has been maintained without consideration of the new matter and as best understood in light of the specification. Claims 6 and 7, although amended, are still rejected under Baratz. Newly added claims 11,12 and 14-16 are rejected under Baratz. Newly added claim 13 is rejected under Baratz in view of Angle, all of which is discusses above.

Conclusion

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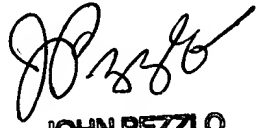
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Odland, who can be reached at (703) 305-3231 on Monday – Friday during the hours of 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached at (703) 305-4744. The fax number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, who can be reached at (703) 305-4750.

deo

March 5, 2004


JOHN PEZZLO
PRIMARY EXAMINER